

# Correcting Errors and Omissions

1. Pinpoint the error(s) in your credit report.
2. Dispute them to the credit bureau(s) by writing a brief letter.
3. Make sure you have proof as to how the information is inaccurate.
4. The credit bureau(s) will investigate your dispute. They have 30 days to respond.
5. If the bureau confirms the error, the consumer must contact the creditor so they can send a correction letter.
6. Write a consumer statement.

**Your credit score will  
change once your  
information has been  
corrected.**

# Credit Report Information

Under the Fair Credit Reporting Act (FCRA), the three major credit bureaus are entitled to provide the consumer with a free copy of their credit report w/o the credit score, upon request, once every 12 months, it is called an Annual Credit Report.

- [www.annualcreditreport.com](http://www.annualcreditreport.com)
- 887-322-8228
- Request a form:  
<http://www.ftc.gov/bcp/online/edcams/freereports/index.html>
- Mail to: Annual Credit Report Request Service  
PO Box 105281  
Atlanta, GA 30348-5281

# Credit Report Information

You are also able to request your credit report and scores through the three major credit bureaus. However, there will be an additional cost if you order through them.

- EXPERIAN  
PO Box 2002  
Allen, TX 75013  
1-888-EXPERIAN (397-3742)  
[www.experian.com](http://www.experian.com)
- TRANSUNION, LLC  
Consumer Disclosure Center  
PO Box 1000  
Chester, PA 19022  
1-800-916-8800  
[www.transunion.com](http://www.transunion.com)
- EQUIFAX  
PO Box 740241  
Atlanta, GA 30374  
1-800-685-1111  
[www.equifax.com](http://www.equifax.com)

**Remember...**

**Do not let credit run or ruin your  
life. Always be a smart and  
savvy consumer!**

## Energy Conservation Primer

When trying to determine ways to reduce your energy bill, you need to look at two major areas: the energy efficiency of your home (weatherization) and you and your family's energy use habits.

### Weatherization

Air infiltrates in and out of your home through every hole, nook, and cranny. Warm air leaking into your home during the summer and out of your home during the winter can cost you lots of money. One of the quickest dollar saving tasks you can do is caulk, seal, and weather strip all seams, cracks, and openings to the outside. You can save 10% or more on your energy bill by reducing the air leaks in your home.

#### Sources of Air Leaks in Your Home

Check the culprit areas listed here:

- Dropped Ceiling
- Recessed light
- Attic entrance
- Electric wires & box
- Plumbing utilities & penetration
- Water & furnace flues
- All ducts
- Door sashes & frames
- Chimney penetration
- Warm air register
- Window sashes & frames
- Baseboards, coves, interior trim
- Plumbing access panel
- Electrical outlets & switches
- Light fixtures

Test your home for air tightness. On a windy day, hold a lit incense stick next to your windows, doors, electrical boxes, plumbing fixtures, electrical outlets, ceiling fixtures, attic hatches, and other locations where there is a possible air path to the outside. If the smoke stream travels horizontally, you have located an air leak that may need caulking, sealing, or weather-stripping.

### **Things You Can Do:**

- Caulk and weatherstrip doors and windows that leak air.
- Caulk and seal air leaks where plumbing, ducting, or electrical wiring penetrates through exterior walls, floors, ceilings, and soffits over cabinets.
- Install rubber gaskets behind outlet and switch plates on exterior walls.
- Look for dirty spots in your insulation. They often indicate holes where air leaks into and out of your house. Seal the holes by stapling sheets of plastic over the holes and caulking the edges of the plastic.
- Install storm windows over single pane windows. Storm windows as much as double the R-value of single pane windows and they can help reduce drafts, water condensation, and frost formation. If you do not wish to go to the expense of providing storms for all of your windows, there is an option available called window insulator film. This is a clear plastic film used with double-sided tape to shrink around your window, window grouping, or glass door. How to install this film will be covered later.
- When the fireplace is not in use, keep the flue damper tightly closed. A chimney is designed specifically for smoke to escape, so until you close it, warm air escapes – 24 hours a day!
- During the winter wrap window air conditioners in plastic and seal them with duct tape for better insulation.

## Caulking 101

Content provided by Sashco Sealants .

The purpose of caulk (note: higher performing caulks are called "sealants") is to seal joints or cracks from the intrusion of water, air (either hot or cold), dust, pollution, insects and noise. Caulk can also serve the merely aesthetic purpose of dressing up or finishing off an otherwise rough-appearing joint. To properly serve these purposes, the caulk must stay in place – without cracking - for an extended period of time, and it can only do so if it maintains good adhesion to both sides of the joint and can easily flex with whatever movement occurs in the joint being sealed.

Understanding the job a sealant does is best understood by comparing its definition to that of an adhesive. Sealants are used to seal joints that move, and adhesives are used to prevent joints from moving. The following describes the basics of how to use caulking to get the most value out of the product, as well as your precious time and effort. By following the guidelines below you will greatly reduce the risk of failure and greatly increase the chances of achieving a sound, durable and attractive seal for many years to come.

### Caulking Tips

#### **1. Your caulking bead can stay neat and even.**

Here is a trick to keeping that caulking bead looking straight and clean. Use masking tape to tape off the areas around the area in which you are caulking, keeping the two pieces of tape at a distance the size of the desired bead. Lay down your bead of caulk. Use your finger to tool the caulk by pushing the excess onto the tape. After tooling, you can remove the masking and you'll find a very nice looking straight, clean, smooth bead of tooled caulk.

#### **2. Car polish can give your shower a great shine.**

Next time you clean your bathroom, get out your car polish. Rub a coat of polish on your ceramic or fiberglass shower enclosure. You'll get a wonderful shine and the water will bead-up and roll off before mildew or mold can begin to form. It will make your next cleaning time a lot easier. However, DO NOT apply car polish to the floor of the shower — it would become a slippery place for an accident ready to happen.

#### **3. A paint stick is a great tool for smoothing caulk.**

After you lay your bead of caulk determine the width you want from tooling and mask it off with masking tape. Next, take a paint stick and clip off the corners to fit the desired width between the two pieces of masking tape and smooth out the bead of caulk with the paint stick.

**4. There is a way to unplug a used tube of caulk.**

Take the tube and cut off the nozzle end so that the hole is slightly larger than the first cut. Next, drive a screw into the nozzle end of the hardened caulk and use the screw to pull the hardened caulk out of the nozzle. A screw with coarse threads, such as drywall or deck screws will work the best.

**5. Your chipped ceramic tile can be repaired.**

It's very simple. All you need is appliance touchup paint. This paint dries to a very hard finish and adheres well to smooth surfaces. Appliance paint comes in only a few colors (white, almond, green, yellow and black) but it can be tinted with other paint to match your tile.

**6. You can cap-off your used cartridge of caulk.**

You just finished your caulking job and there's product still left over in the tube. Here's a couple quick ways to store your cartridge for later use. A plastic electrical connector is an easy way to quickly seal and reopen the tube. If you can't find a connector, place a 2" nail into the end of the nozzle, then wrap the entire nozzle tightly in Saran Wrap® or Reynolds Wrap®. This will keep the caulk in the nozzle from hardening for use at a later date.

**7. Sun-damaged wood fibers can cause adhesion failure in caulks.**

Surface wood fibers can be appreciably damaged in as little as 2-4 weeks when exposed to direct, intense sunlight. This has been determined by the USDA's Forest Products Research Laboratory in Madison, Wisconsin (in repeated studies over many years). If a sealant (or a coating) is applied to such damaged wood, it can lead to premature failure of the sealant (or coating) because the sealant can much more readily lose its adhesion. (In reality, the sealant adheres quite well to the surface wood fibers themselves, but the surface fibers lose their attachment to the bulk of the wood.)

**8. Oil-based caulking compounds can cause windows to "fog up."**

Make sure you never use an oil-based caulking compound around insulating glass ("thermal-pane") windows. The vegetable oils in these types of caulking compounds aggressively attack polysulfide polymers (the primary sealants used for such windows). The polysulfide degrades, cracks and causes the window to fail and "fog up".

**9. Shrinkage of a caulking bead is not necessarily bad.**

Sometimes "shrinkage" of a caulking bead is thought to potentially lead to performance problems with the sealant. While this can occur with some types of sealants (silicones and polyurethanes, for instance), for many other types of sealants it does not pose a real performance problem. Such products as Acrylic Latex, Butyl, SBR, Polysulfide, and others do not suffer severe performance problems when they experience a moderate amount of shrinkage during their cure.

**10. Elastomeric latex caulks need 1-3 days to cure.**

Always give elastomeric latex caulks plenty of time (1-3 days) to cure before painting them. The reason is that these types of caulk are much more elastic than any paint that is applied over them and the paint can't stretch enough to avoid cracking during the caulk's curing (and subsequent shrinkage).

**Tip:** Never caulk the small openings in storm windows. They are there to allow moisture to escape and not condense on the glass.

## **New Weather Stripping Improves Door Performance Keeping Heat In and Cold Drafts Out**

By: Paul Bianchina

Air infiltration - the movement of outside air into and out of your home - can account for a significant amount of heat loss, and the resulting air currents can make a home feel uncomfortably drafty. And when it comes to air infiltration the most common culprits are your exterior doors, so investing a few weekend hours installing some new weather stripping can have some pretty dramatic results.

### **Selecting the Right Weather Stripping**

The type of weather stripping to use depends somewhat on the type of door and frame you have, and also on how much time and effort you want to devote to the task.

The easiest and least expensive is foam, but, while it's better than nothing, foam doesn't form a tight, uniform seal and is also easily damaged. Foam weather stripping comes in rolls of different widths and thicknesses, and is self-adhesive. It is applied to the inside edge of the doorstop - the wood strips mounted on the door frame that the door closes against - and is designed to form a seal when the door closes against it. Select a foam that is the same width as the thickness of the doorstop - typically 1/2" - and that is thick enough to close the gap between the door and the stop. Simply cut the foam to length with a pair of scissors, peel off the backing paper, and press it firmly against the doorstop.

A better choice is a compression weather stripping, which also fits between the door and the doorstop to seal off air leaks, but has the advantage of being easier to adjust and considerably more durable. One type of compression weather stripping is a semi-rigid, high-density foam strip that mounts into a slot in the doorstop. Most new doors now come with this type of weather stripping, and if you need to replace an existing piece on one of your doors, installation is simply a matter of cutting the replacement material to length and tucking the flange on the weather stripping into the slot on the doorstop. If your door does not currently have this type of weather stripping, adding it would necessitate removing the doorstops, cutting a slot along one edge, then reinstalling them.

Almost as effective -- and easier to install - is vinyl bulb weather stripping. Vinyl bulb weather stripping has a tough, hollow tube of vinyl set in a rigid piece of aluminum, and a complete weather stripping kit contains two long pieces for the sides of the door, one short piece for the top, and all the necessary screws or nails for installation. To install, cut the short piece to fit between the doorstops. Close the door, place the weather stripping on the face of the doorstop so that the vinyl bulb is slightly compressed against the face of the door, and nail it in place. Then simply repeat the process with the two side pieces.

To complete any door weather stripping operation, don't forget the gap between the bottom of the door and the wood or metal doorsill. The simplest way to close this off is to use a door sweep, which is a flat aluminum strip with a piece of vinyl weather stripping in one edge - simply screw the strip to the outer face of the door so that the vinyl makes contact with the sill and covers the gap.

More effective, however, is the door bottom, which is an L- or U-shaped aluminum strip with a curved vinyl insert on the bottom. The metal fits over the very bottom of the door, and is adjusted up or down so that the vinyl forms a complete seal against the sill. Installation may require removing the door and cutting a little bit off the bottom to accommodate the thickness of the metal and vinyl.

All of these types of weather stripping are available at home centers, lumber yards, hardware stores and discount stores, and come with complete installation instructions and all of the necessary hardware for fast and easy installation.

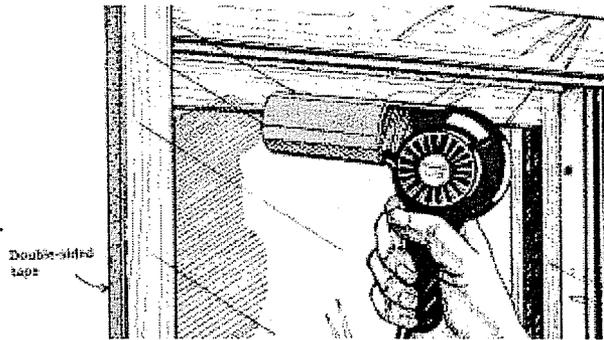
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## Storm Windows and Doors

Triple and double track storm windows that are permanently installed and can be opened any time with a screen that slides into place for ventilation are the most efficient way of preventing heat and cooling losses. They usually, however, require a sizeable outlay of money which may not be possible. There are many do-it-yourself storm window and door kits available if you do not wish to go to the expense of providing storms for all of your windows. Check with your hardware or home building supply store, Kmart, Wal-mart, etc. for the choices you may have.

One of the options should be window insulator film. Application of window film is easy:

1. Measure and cut the double-sided tape and apply it to clean outside edges or faces of the window molding.
2. Unfold the provided film and cut it to the size of the window (including trim), allowing two inches extra all around.
3. Start at the top and press the film securely to the tape. The film will have wrinkles.
4. Now shrink the film with a hair blow dryer set on the highest setting. Do not touch the film as you do this. Just aim the hot air evenly over the entire covering. This takes the wrinkles out and leaves you with a clear pane to see through.
5. Trim the excess film with a sharp utility knife or scissors. This film reduces air leak by approximately 97%, thus reducing frost buildup on windows. The film and the tape can be removed at the end of the season.



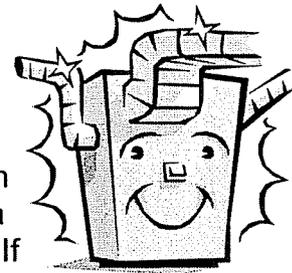
Pages 22 and 23 in the Appendix cover permanent storm doors and windows. The information will not be covered in class discussion but is included as reference material for you to use should you decide to buy permanent ones sometime in the future.

## You and Your Family's Energy Use Habits

Ok, now that your home has been weatherized and is no longer "leaking" energy dollars, it's time to take a long hard look at your energy habits. We are going to explore ways to reduce the dollars you spend on energy each month, but as we do, you need to keep one thing in mind. The success you have in this area is directly dependent on **YOU**. Some will require minimum effort (doing something once or twice a year) but others will require continual effort which will be much harder to maintain. If you do, however, you will see the savings in your utility bills.

### Heating/Cooling Equipment

Inspect heating and cooling equipment annually, or as recommended by the manufacturer. If you have a forced air furnace, check your filters and replace them as needed. Generally they should be changed about once every month or two, especially during periods of high usage. Have a professional check and clean your equipment once a year. If the unit is more than 15 years old, you should consider replacing it with one of the newer, energy-efficient units. This would go far to reduce your energy consumption, especially if the existing equipment is in poor condition. Check your ductwork for dirt streaks, especially near seams. These indicate air leaks, and they should be sealed with a duct mastic. Insulate any ducts or pipes that travel through unheated spaces. An insulation R-Value of 6 is the recommended minimum.



### Set Back Thermostats

Adding an automatic set back thermostat to a heating and cooling system can save a lot of money. How much you save will depend on where you live and which season (heating or cooling). The normal savings at a 10 degree (F) setback in the Midwest USA will amount to about 15% of your energy bill when the set back is done nights and daily, when you're not home. The advantage of the automatic set back thermostat is that you won't forget and the temperature will be normal when you get home or wake up. Other areas will notice savings, but it depends on location, and which season is mostly needed for operation of your heating/cooling system.

If you have a heat pump, you should not set back your thermostat manually because your energy bill may go up. You will require an "intelligent" set back thermostat, made for heat pumps.

### Lighting

Energy for lighting accounts for about 10% of your electric bill (\$50 - \$150 for an average family). Examine the wattage size of the light bulbs in your house. You may have 100 watt (or larger) bulbs where 60 or 75 watts would do. Dust your light bulbs. Dirt absorbs



light and wastes energy. Turn off lights when leaving rooms and consider compact fluorescent light bulbs (CFLs) for areas where lights are on for hours at a time.

### **Double Your Energy Savings with Fluorescent Lights**

Most folks use standard "incandescent" light bulbs. These bulbs burn out often, create heat, and are very inefficient for making light. You can save a great deal of money by replacing your old fashion light bulbs with "fluorescent" lighting.

Benefits of fluorescent lighting:

- cool to touch and lowers cooling needs -- \$AVE
- energy cost is 50% to 75% less -- \$AVE
- bulbs last 10 to 20 times longer -- \$AVE

Ceiling light fixtures can be replaced with fluorescent fixtures. There are also many fluorescent lamps that are designed to fit in a standard medium-base light socket. While the initial cost may be much higher than old fashioned incandescent bulbs, the newer fluorescent bulbs last so long that you'll actually spend less!

Your local hardware or department store probably carries a wide selection of fluorescent lights that will fit in standard lamp sockets. If you're going to replace ceiling light fixtures, be sure to turn OFF the power before you start, use wire nuts to make the power connects, and for safety, cover the wire and nuts with electrical tape.

### **Timers for Indoor Lighting**

Your indoor lamps can be controlled with a timer to provide light when you're gone for security. It's handy when you come home to have some lights on. These are small, square, plug-in devices that cost \$10 or less. Some allow multiple on/off times. If you use 3 or 4 of these, it can give your home a "lived in" look" even when you're gone by staggering the on/off times.

### **Electric Water Heater Timer**

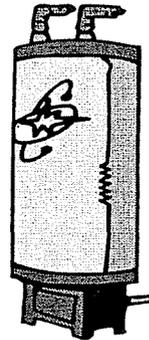
If you are a typical user of hot water, there's a good chance you will save money with a water heater timer. They are made with two on/off times per day and optionally with a weekend over-ride [the weekend is skipped for off times].

For best use, the on time should be an hour or so before you will need hot water and the off time set to the time you will not need hot water, or will not be home. Most have a manual on switch for holidays or times during the week you will be home.

The cost of this switch will vary on where you purchase it. Often it will cost about \$35 to \$50, plus installation. It depends on how you set it, and how much you use hot water, but you should be able to save 10% to %20 on your hot water heating cost.

### **Don't Set Your Water Heater Too High**

Set your water heater at 120 degrees (for safety from Legionnaire's Disease.) Your water heater will last longer and it will cost you much less to heat water.



### **Water Saving Shower Head**

Replacing your old shower head with a new efficient one will use 15% to 50% less water. This will cut your water bill and energy bill for heating water.

### **Use Cold Water for Washing Clothes**

Most modern washing powders and liquids work well in cold water. Older washing machines used warm water rinse and cannot be made to use just cold water. To prevent your washer from using any hot water just turn off the hot water faucet where your water hoses for the machine connects. Sometimes, the faucet may leak a little if it hasn't been used in a while. Use a wrench and tighten the "packing nut" which is the part located where the spindle comes out of the body of the faucet.

### **Summer Energy Saving Tips**

In the summer, many folks will be using their air conditioner to cool their home. In our Heating & Cooling section, there's a helpful article for tuning up your air conditioner, and making sure it is in good working condition. Besides this, there are many things you can do to help save money on your costs of cooling your home. Here are some ideas for you:

- If you have a dishwasher, use the "air dry" setting instead of the "heated air" setting, and run it late at night to reduce the heat it creates during the warmer part of day
- When taking a shower, or bath, use the exhaust fan in your bathroom to remove the moisture and humidity
- Be certain your clothes dryer is vented outdoors
- When cooking, be sure to use lids to keep from adding steam
- Limit use of your oven, and any heat generating appliance
- Keep all doors and windows closed. Use storm doors and windows to insulate the heat from outdoors
- Use insulated drapes on windows that face the sun. Tinted or reflecting window film can be added to reduce the heat from sunlight -- you can remove these in the winter
- Ceiling fans, and other fans, will make you FEEL cooler, allowing you to set the thermostat at a higher temperature
- Using fluorescent lighting will save electricity plus will not create as much heat as standard incandescent lighting

Besides reducing the heat generated in your home, pay special attention to things that raise the humidity. Your cooling unit works especially hard to remove humidity from the air. As a matter of fact, it takes a great deal more energy to remove humidity than to cool your home. Also, when the humidity is lower, you will feel cooler, even at a higher temperature.

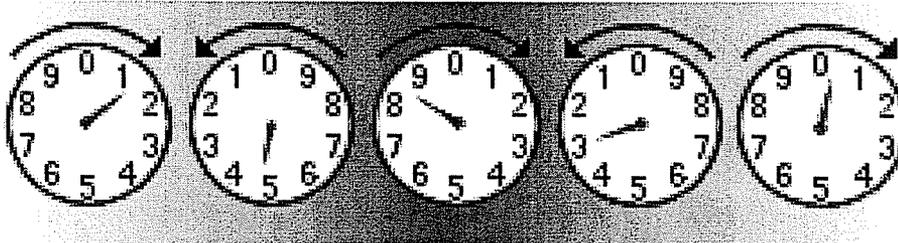
### Reading the Electric Meter

The dials on your electric meter resemble small clocks. Within each dial the numbers range from zero to nine and a hand points to a number within each dial. When reading each dial, it is important to note that some dials run clockwise and others run counterclockwise. The hand follows the numbers and only advances when electricity is being used.

#### Steps:

- Stand directly in front of the meter (this will give you the best view of where the hand is pointing)
- Read and record the number from each dial starting from the right and moving left
- When the hand is between two numbers or has just passed a number, record the smaller number (e.g. hand is between the 5 and 6 or has just passed the 5, record the number 5).
- When the hand appears to be directly on a number, before recording that number, be sure to check the dial to the right. If the hand has not passed zero record the smaller number instead.

What reading would you record for this example? (see answer below)



The correct reading for this example is 1 4 8 3 0

From the Cinergy.com/ulhp Website

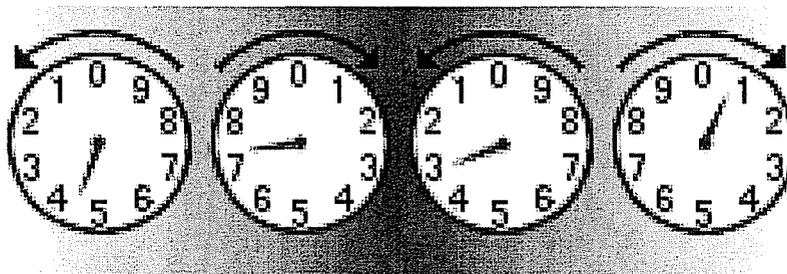
### Reading the Gas Meter

The face of a gas meter usually has two sets of dials. The dials marked "One-Half Foot" and "Two Feet" are for test purposes only and are not to be used for meter reading purposes. The dials on your gas meter resemble small clocks. Within each dial the numbers range from zero to nine and a hand points to a number within each dial. When reading each dial, it is important to note that some dials run clockwise and others run counterclockwise. The hand follows the numbers and only advances when gas is being used. Some gas meters look much like the odometer on your car. To read this type of gas meter, simply record the numbers displayed.

#### Steps:

- Stand directly in front of the meter (this will give you the best view of where the hand is pointing)
- Read and record the number from each dial starting from the right and moving left
- When the hand is between two numbers or has just passed a number, record the smaller number (e.g. hand is between the 5 and 6 or has just passed the 5, record the number 5).
- When the hand appears to be directly on a number, before recording that number, be sure to check the dial to the right. If the hand has not passed zero record the smaller number instead.

What reading would you record for this example? (see answer below)



The correct reading for this example is 4 7 3 0

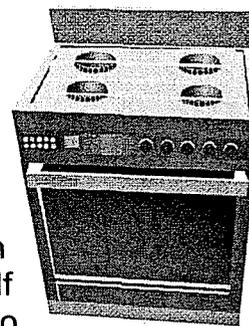
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# Appendix



## Tips for Lowering Your Oven/Range Energy Usage

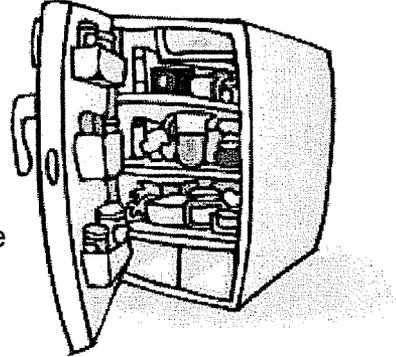
- Preheat ovens only when necessary. With conventional ovens, keep the preheating time to a minimum. Unless you're baking breads or pastries, you may not need to preheat the oven at all.
- Food cooks more quickly and efficiently in ovens when air can circulate freely. Don't lay foils on racks. If possible, stagger pans on upper and lower racks to improve air flow.
- Use glass or ceramic pans in ovens. You can turn down the temperature about 25°F and cook foods just as quickly.
- Do not open the oven door often to preview the food. Each time you open the door the oven temperature drops by 25° - 50°F. Watch the clock or use a timer instead.
- Full-size ovens are not very efficient for cooking small- to medium-sized meals. Try to do most of your cooking on the top of the range and use crock-pots, electric skillets, toaster ovens or microwave ovens whenever possible to save energy.
- Check to be sure the oven door gasket is tight. Adjust or replace gaskets as required.
- If you have a self-cleaning oven, consider using the self-cleaning feature immediately after regular baking when the oven is still hot. Less energy will be required to reach the cleaning temperature. Try not to use the self-cleaning feature too often.
- Keep range-top burners and reflectors clean; they will reflect the heat better and save energy.
- Match the size of the pan to the heating element; more heat will get to the pan and less will be lost to the surrounding air. A 6-inch pan on a 8-inch burner will waste over 40% of the energy.
- On electric stove-tops, use only flat-bottomed pans that make full contact with the element. A warped or rounded pan will waste most of the heat.
- When cooking with a gas range-top burner, use moderate flame settings to conserve gas. Also make sure the pilot light is burning efficiently, with a blue flame. A yellowish flame indicates an adjustment is needed because the gas is burning inefficiently.
- Whenever possible, use a pressure cooker. By cooking food at a higher temperature and pressure, cooking time is reduced dramatically and energy use is cut by 50-75%.



## Refrigerator/Freezer Energy Saving Tips

### Refrigerator Tips:

- Look for a refrigerator with automatic moisture control. Models with this feature have been engineered to prevent moisture accumulation on the cabinet exterior without the addition of a heater. This is not the same thing as an "anti-sweat" heater. Models with an anti-sweat heater will consume 5% to 10% more energy than models without this feature.
- Don't keep your refrigerator or freezer too cold. Recommended temperatures are 37° to 40°F for the fresh food compartment of the refrigerator and 5°F for the freezer section. If you have a separate freezer for long-term storage, it should be kept at 0°F.
- To check refrigerator temperature, place an appliance thermometer in a glass of water in the center of the refrigerator. Read it after 24 hours. To check the freezer temperature, place a thermometer between frozen packages. Read it after 24 hours.
- Regularly defrost manual-defrost refrigerators and freezers; frost buildup increases the amount of energy needed to keep the motor running. Don't allow frost to build up more than one-quarter of an inch.
- Make sure your refrigerator door seals are airtight. Test them by closing the door over a piece of paper or a dollar bill so it is half in and half out of the refrigerator. If you can pull the paper or bill out easily, the latch may need adjustment or the seal may need replacing.
- Cover liquids and wrap foods stored in the refrigerator. Uncovered foods release moisture and make the compressor work harder.
- Move your refrigerator out from the wall and vacuum its condenser coils once a year unless you have a no-clean condenser model. Your refrigerator will run for shorter periods with clean coils.



### Freezer Tips:

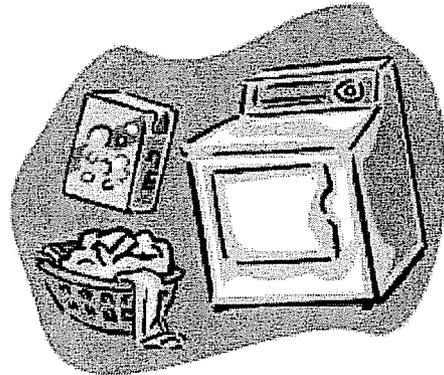
- Locate freezers away from heat sources and direct sunlight.
- Allow at least 1 inch space on each side of freezer to allow good air circulation.

- Freezers can be installed in an attached garage or basement. However, don't put a freezer in a space that frequently goes below 45°F, as the refrigerant will not work properly.
- Freezer temperature should be kept at 0°F.
- Regularly defrost manual defrost freezers; frost build-up increases the amount of energy needed to keep the motor running. Don't allow frost to build up more than 1/4 inch.
- Make sure the freezer door closes tightly. Check the door seals and gaskets periodically for air leakage. Lubricate the gaskets with petroleum jelly to keep them from cracking or drying out.
- Avoid putting hot foods directly in the freezer. Let them cool in the room first.
- A full freezer will perform better than a nearly empty freezer.
- Mark items in the freezer for quick identification so that you don't have to keep the door open longer than necessary.

## Energy Saving Laundry Tips

### Washer Tips:

- Locate the washing machine close to the hot water tank, if possible, to reduce the heat loss in long pipe runs. Insulate exposed pipes.
- Keep your hot-water heater thermostat setting at 120°F. Each 10°F reduction in water temperature will cut the cost of washing clothes by up to 13%.
- You can save considerable amounts of energy in the laundry through conservation of hot water and by using your automatic washers and dryers less often and more efficiently.
- Wash clothes in cold water, using cold-water detergents whenever possible. It's your laundry detergent, not the water temperature, that whitens your clothes. You'll save energy and money
- Fill washers (unless they have a small-load attachment or variable water levels), but do not overload them. In general, washing one large load is more efficient than washing two small loads.



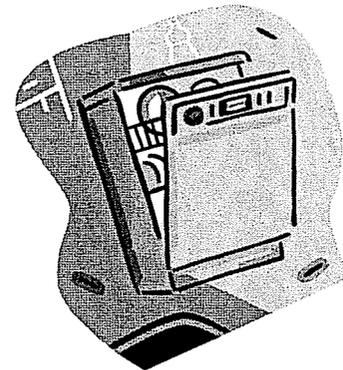
- Don't use too much detergent. Follow the instructions on the box. Over-sudsing makes your machine work harder and use more energy.
- Do not over-wash clothes. Delicate clothes don't need as long a wash cycle as dirty work clothes.
- Presoak or use a soak cycle when washing heavily soiled garments. You'll avoid two washings and save energy.

#### **Dryer Tips:**

- Clean the lint filter after every laundry load. Clothes will dry faster and you will save energy.
- Don't add wet items to a near-dry load.
- Don't over dry clothes. Removing them from the dryer before they wrinkle will eliminate ironing and save energy.
- Make sure the dryer is properly vented.

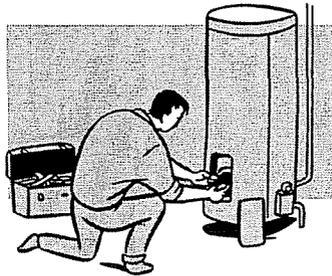
#### **Dishwasher Energy Saving Tips**

- Don't install your dishwasher near your refrigerator/freezer.
- Check the manual that came with your dishwasher for the manufacturer's recommendations on water temperature; many have internal heating elements that allow you to set the water heater to a lower temperature.
- Scrape, don't rinse, off large food pieces and bones. Soaking or prewashing is generally only recommended in cases of burned-on or dried-on food.
- Be sure your dishwasher is full, but not overloaded.
- Don't use the "rinse hold" on your machine for just a few soiled dishes. It uses 3 to 7 gallons of hot water each time you use it.
- Let your dishes air dry; if you don't have an automatic air-dry switch, turn off the control knob after the final rinse and prop the door open a little so the dishes will dry faster.



## Water Heater Energy Saving Tips

- Set water heater at 120° to save energy.
- Don't let the hot water run when washing dishes or shaving.
- Low flow showerheads can reduce your hot water energy by up to 1/3.
- Take short showers. Baths use 15 -25 gallons of hot water and account for the most hot water usage in an average household. A five minute shower uses less than 10 gallons.
- It costs more to wash dishes by hand than with a dishwasher unless you rinse by hand in lukewarm water.
- Repair leaky faucets promptly. A faucet leaking one drop of hot water each second can waste 200 gallons of hot water a month or 2,400 gallons a year.
- Wrapping insulation around your water heater and water pipes is a conservation measure that can save you energy and money.



## Storm Windows

Triple track, combination (windows and screen) storm windows are designed for installation over double hung windows. They are permanently installed and can be opened any time with a screen slid into place for ventilation. Double-track combination units are also available and they cost less. Both kinds are sold almost everywhere, and can be bought with or without the cost of installation. You can save a few dollars (15% to 20% of the purchase price) by installing the windows yourself. But you'll need some tools: caulking gun, drill, and screw driver. In most cases it will be easier to have the supplier install your windows for you, although it will cost more.

The supplier will first measure all the windows where you want storm windows installed. It will take anywhere from several days to a few weeks to make up your order before the supplier returns to install them. Installation should take less than one day, depending on how many windows are involved. Two very important items should be checked to make sure the installation is properly done.

Make sure that both the window sashes and screen sash move smoothly and seal tightly when closed after installation. Poor installation can cause misalignment. Be sure there is a tightly caulked seal around the edge of the storm windows. Leaks can hurt the performance of storm windows a lot.

**Frame finish:** A mill finish (plain aluminum) will oxidize, reducing ease of operation and degrading appearance. An anodized or baked enamel finish is better. Extruded vinyl is also available, and when properly designed vinyl works fine.

**Corner joints:** Quality of construction affects the strength and performance of storm windows. Corners are a good place to check construction. They should be strong and air tight. Normally overlapped corner joints are better than mitered. If you can see through the joints, they will leak air.

**Sash tracks and weather stripping:** Storm windows are supposed to reduce air leakage around windows. The depth of the metal grooves (sash tracks) at the sides of the window and the weather stripping quality makes a big difference in how well storm windows can do this. Compare several types before deciding.

**Hardware quality:** The quality of locks and catches has a direct effect on durability and is a good indicator of overall construction quality.

## Storm Doors

Combination storm doors (windows, screens and combinations thereof) are designed for installation over exterior doors. They are sold almost everywhere, with or without installation.

**Installation** You can save a few dollars (15% to 20% of the purchase price) by installing doors yourself. But you'll need some tools: hammer, drill, screw driver, and weather stripping. In most cases, it will be easier to have the supplier install your doors himself.

The supplier, or you as the installer, must measure all the doors where you want storm doors installed. It will take anywhere from several days to a few weeks to make up custom sizes and install them. Installation should take less than one-half day.

Before the installer leaves, be sure the doors operate smoothly and close tightly. Check for cracks around the jamb and make sure the seal is as air-tight as possible. Also, remove and replace the exchangeable panels (window and screen) to make sure they fit properly and with a weather tight seal.

### Selection:

**Door finish:** A mill finish (plain aluminum) will oxidize, reducing ease of operation and degrading appearance. An anodized or baked enamel finish is better.

**Corner joints:** Quality of construction affects the strength and effectiveness of storm doors. Corners are a good place to check construction. They should be strong and air tight. If you can see through the joints, they will leak air.

**Weather stripping:** Storm doors are supposed to reduce air leakage around your doors. Weather stripping quality makes a big difference in how well storm doors can do this. Compare several types before deciding.

**Hardware quality:** The quality of locks, hinges and catches should be evaluated since it can have a direct effect on durability and is a good indicator of overall construction quality.

**Construction material:** Storm doors of wood or steel can also be purchased within the same price range as the aluminum variety. They have the same quality differences and should be similarly evaluated. The choice between doors of similar quality but different material is primarily up to your own personal taste.

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# NOTES

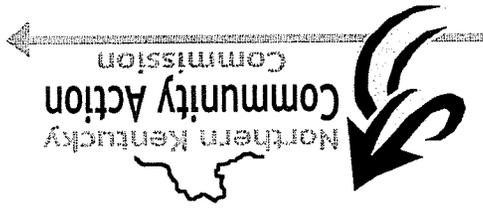
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## Energy IQ

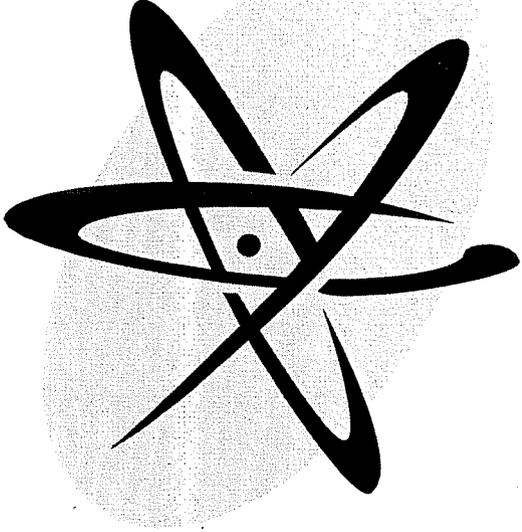
	True	False
1. You can save as much as 10% on your energy bill by setting your thermostat back 10 degrees.	_____	_____
2. It costs more to wash dishes by hand than with a dishwasher unless you rinse by hand in lukewarm water.	_____	_____
3. It's your laundry detergent not the water temperature that whitens your clothes.	_____	_____
4. Low flow showerheads can reduce your hot water energy usage by up to 1/3.	_____	_____
5. You can set your oven 25°F lower when you bake with glass or ceramic dishes.	_____	_____
6. An empty freezer uses less energy than a full one.	_____	_____
7. You can use landscaping to help lower your utility bills.	_____	_____
8. Using crock-pots, toaster ovens, microwaves and electric skillets saves electricity.	_____	_____
9. You use less than 10 gallons of hot water for a bath, but 15-25 gallons for a five minute shower.	_____	_____
10. You don't need to defrost a manual refrigerator/freezer until the frost is at least 1/2 inch thick.	_____	_____
11. Energy saving compact fluorescent light (CFL) bulbs use up to 75% less energy and last up to 13 times longer than standard bulbs.	_____	_____
12. A portable or ceiling fan costs about a penny an hour to run.	_____	_____
13. Fixing leaky faucets can save 1,000 gallons of heated water a year.	_____	_____
14. Cleaning light bulbs can save energy.	_____	_____
15. You should always keep your hot water heater set on "HI"	_____	_____

# PaymentsPlus

**Cinergy/ULH&P  
&  
The Northern Kentucky  
Community Action  
Commission  
welcome you to**



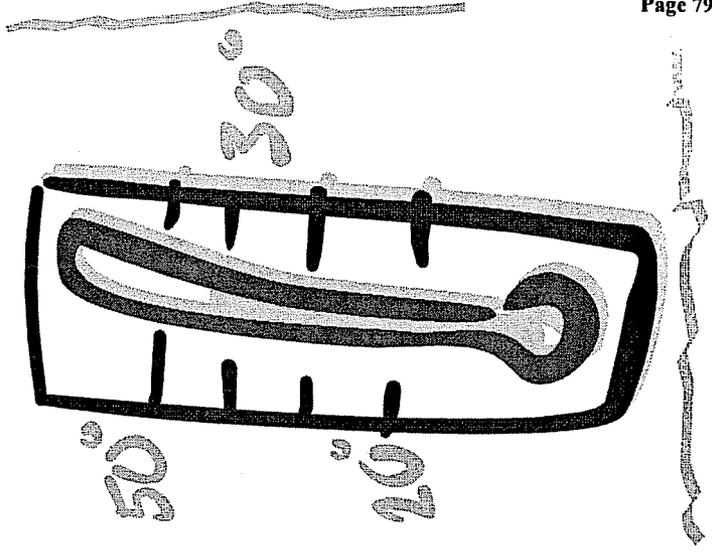
# **The Golden Rule of Energy Conservation:**

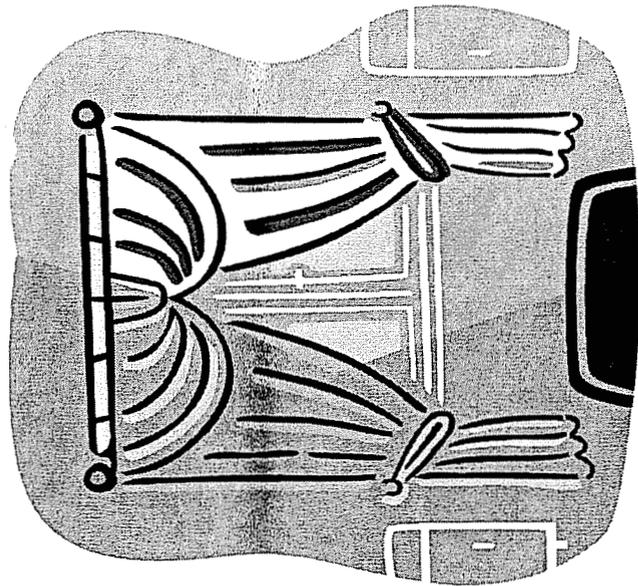


**Appliances that heat and  
cool use the most energy.**

The best way to save energy is to reduce your use of heaters, air conditioners and water heaters.

- Set your thermostat at 68° or below during the heating season.
- Set your thermostat at 78° or above during the cooling season.
- Clean or replace your heating and cooling filters once a month.
- Use natural ventilation, heating and cooling whenever possible.
- Use fans - ceiling or portable.
- Install a programmable thermostat.

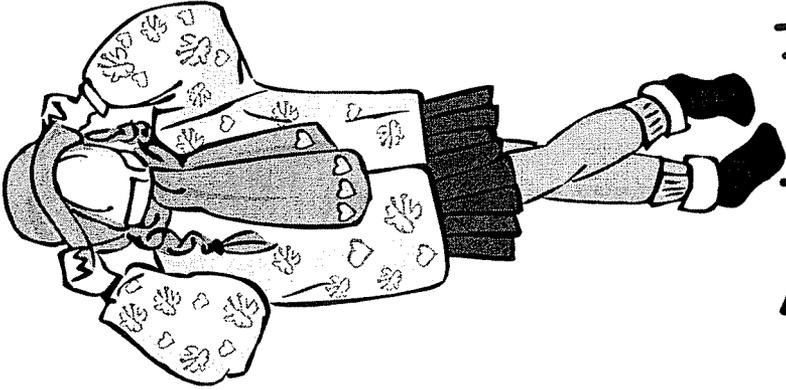




- During the heating season:
  - Close draperies and shades at night and on cloudy, windy days.
  - Open draperies and shades on sunny days.
- During the cooling season:
  - close the drapes and shades on sunny days;
  - limit your use of appliances that produce heat, such as the oven, clothes dryer and dishwasher. When you do use them, try to avoid doing so during the hottest part of the day.
  - Install and use an attic fan during the summer
  - Use landscaping to help lower utility bills.

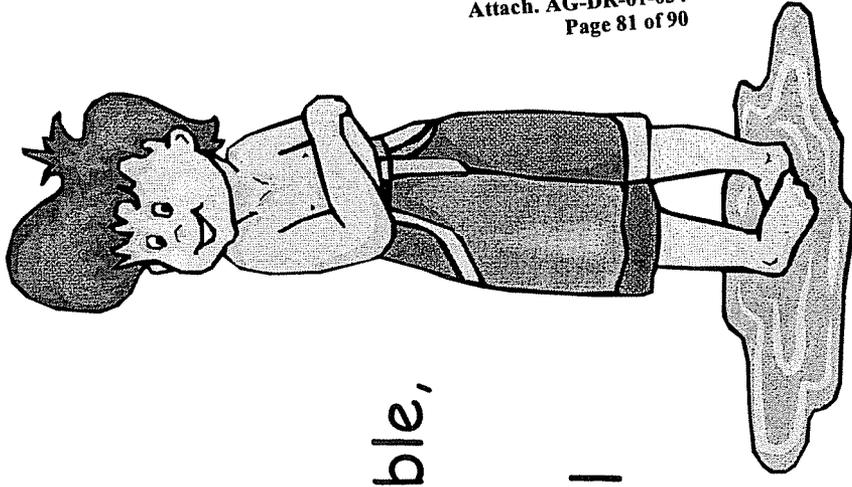
## During the heating season:

- Dress warmer. Layered clothing is particularly helpful.
- Sleep under multiple blankets and/or comforters.



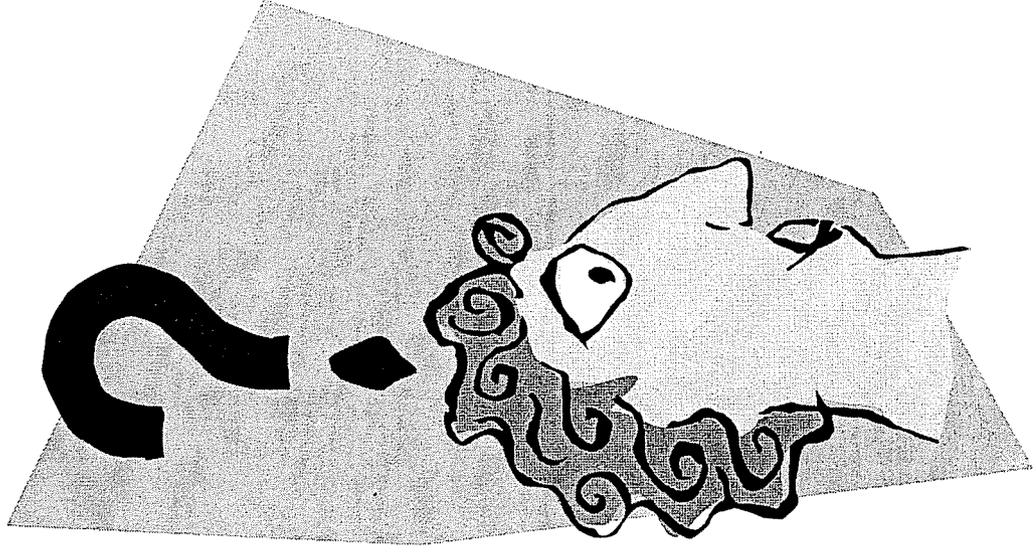
## During the cooling season:

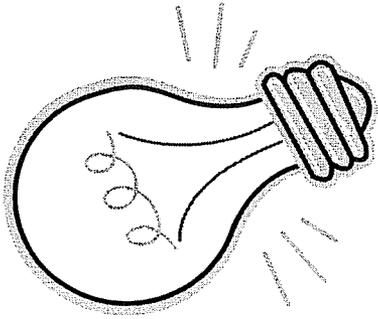
- Dress cooler. Shorts are not only comfortable, they can help you save energy.
- Use few, if any blankets. A sheet may be all you need.



# How else can you save energy?

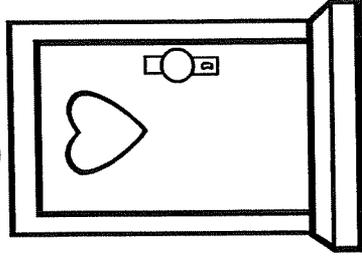
Saving energy, and perhaps even more importantly, saving money on energy isn't all that hard. There are many things you can do to lower your energy bills. Let's look at some of these ways you can cut your usage and your bills.





## Turn off, Close and Save

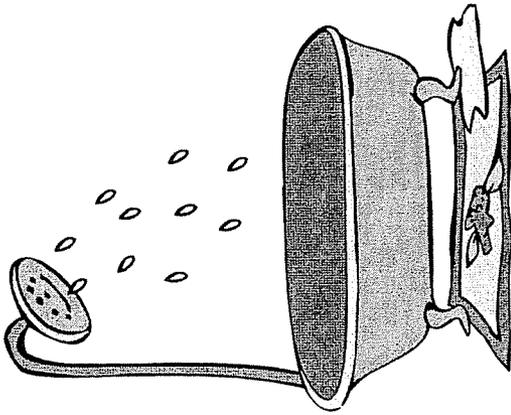
- Turn off appliances when they aren't being used.



- Close exterior doors quickly after use.
- Close doors and windows tightly when using the furnace or air conditioner.
- Use your fireplace sparingly. It sends heat up the chimney. Seal flue with a tight-fitting damper when not in use.
- Turn off the lights when you leave the room.
- Replace incandescent bulbs with CFLs.



## Be Water Wise!

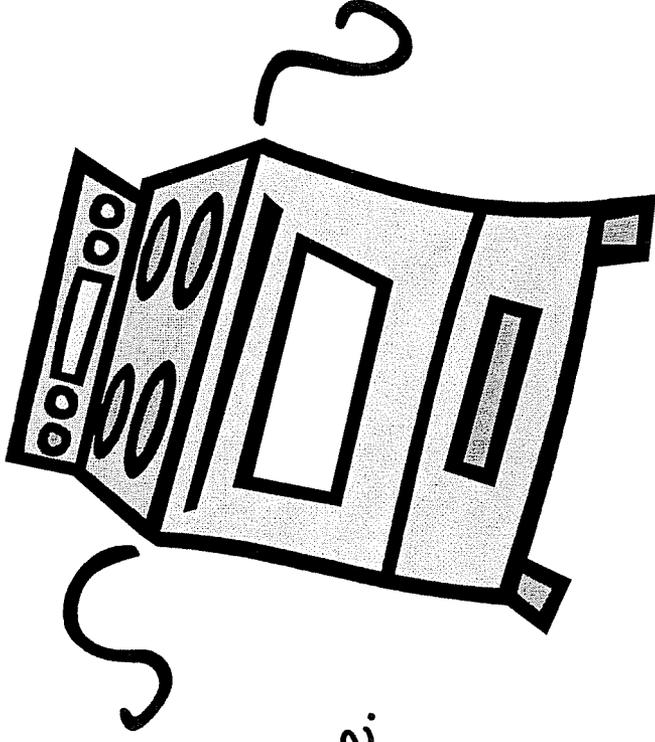


- Wash clothes in warm or cold water instead of hot and always rinse in cold.
- Fill up the sink when shaving, brushing your teeth, washing dishes, etc. Don't let water run.
- Take short showers instead of baths. If you do take a bath, don't use more than 6 inches of water.
- Install a water-saving showerhead.
- Use the washing machine or dishwasher only when you have full loads.
- Fix leaky faucets. One drip per second can mean a loss of 20 -30 gallons per week.
- Turn your water heater down to 120 degrees.

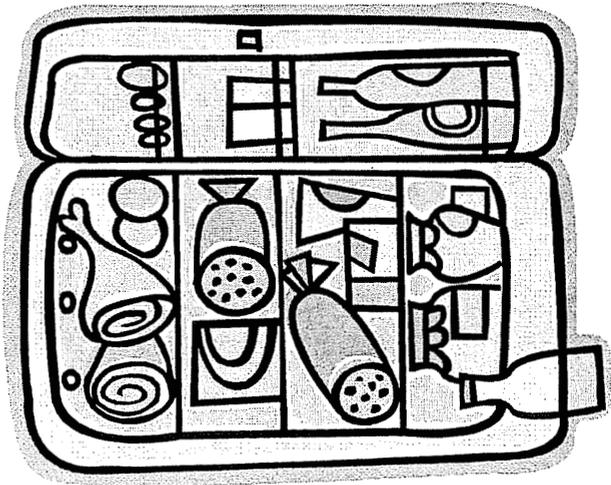
## Cook & Store Food Wisely!

The kitchen uses a lot of energy. Use these tips to cut down on expense:

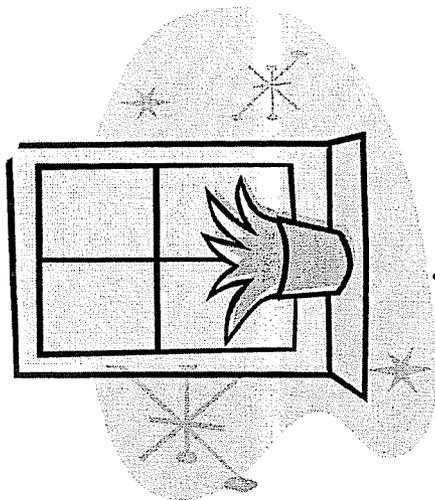
- Use a microwave, crockpot, toaster oven, electric skillet, etc., whenever possible.
- Match pan or pot to burner size.
- Always use lids when you cook. It speeds up the cooking and reduces wasted energy.
- When using your oven, bake several things at the same time. Use glass or ceramic pans/dishes.
- Never use your oven to heat the kitchen.



- Keep the refrigerator door closed as much as possible.
- Keep the freezer full. An empty freezer has to work too hard to keep the food cold. Add ice to fill it up if necessary.
- Vacuum refrigerator coils (those things on the back of the refrigerator that look like radiators).
- Keep the refrigerator and freezer defrosted.



- Thaw frozen foods a day ahead in the refrigerator. This saves energy while keeping the other food cold.

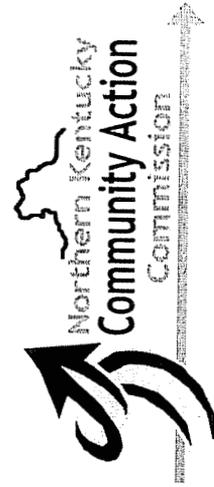


# Plug Air Leaks!

- Check for air leaks or drafts and plug them with caulk or weather stripping.
- Put plastic on the inside of windows during the heating season. Attach with clear sealing tape NOT staples.
- If possible, install storm windows and doors.
- Make sure the bottoms of exterior doors are well sealed.
- If there are rooms in your house that are largely unused, close off the registers in them and keep their doors shut.

# The End

**CINERGY**<sup>®</sup>  
*the power of change*



# The Power is in Your Hands

## Simple Things You Can Do To Save Energy

### TAKE THE HOME ENERGY TEST!

There are lots of things each of us can do right in our own homes to save energy. Saving energy will help save money on electric bills, help save the environment, and keep us more comfortable. It's a good idea to go through your house room-by-room and take this home energy test. It's your first step in becoming an energy saver!



### THE KITCHEN

Y  N Does your refrigerator close tightly? Adjust the door. Clean dried food off the rubber rim

Y  N Is the refrigerator in the right place? If it's possible, move the refrigerator out of the sun and away from the stove.

Y  N Have the coils behind or underneath the refrigerator been cleaned recently? The fridge should be unplugged and the condenser coils vacuumed at least twice a year.

Y  N Are there any empty spaces in the freezer? Fill empty space in the freezer with gallon jugs filled with water.

Y  N Is the temperature of the refrigerator between 38° and 42° Fahrenheit? And is the temperature of the freezer between 0° and 5° Fahrenheit? That's where they should be! Use a household thermometer to take the temperature.

Y  N Does your kitchen sink have an aerator that reduces the flow of water? Install one and use it.

### THE BATHROOM

Y  N Does you shower have an energy-efficient showerhead? Replace your standard showerhead with an energy-efficient one that uses only about 2.5 gallons of water per minute.

Y  N Does your sink have an energy-efficient faucet head? Replace your standard faucet head with a faucet aerator.

Y  N Is the water off when you're not using it? Do your faucets leak? Turn off the water when you don't need it. Get leaks fixed.

Y  N Do you use energy-efficient bulbs? Replace the incandescent bulbs you use most with energy-efficient compact fluorescent bulbs. They save lots of energy.

Y  N Do you turn lights off when you leave the room? Turn lights off when you aren't using them.

Y  N Are bathroom windows airtight? Seal up leaks with weatherstripping, caulk or even use fabric "snakes" to keep out those nasty drafts.

## THE LIVING ROOM

Y  N **Are your windows and doors airtight?**

Seal up leaks using the same materials suggested for the bathroom windows.

Y  N **Is your fireplace airtight?** Make sure the damper is tightly closed when it's not in use and seal it up if you aren't using it at all.

Y  N **Are you using energy-efficient bulbs?** Compact fluorescent bulbs (CFLs) require 75% less energy and last up to 13 times longer than incandescent.

Y  N **Are lights, stereos, TVs video games and computers off when no one is in the room?** Turn off these and other gadgets when you're not using them.

## THE BEDROOM

Y  N **Are you using energy-efficient bulbs?** CFLs work as well in the bedroom as they do in the other rooms in your house. Take advantage of their money saving properties!

Y  N **Are your windows airtight?** Seal up all leaks with weather-stripping and caulk as you did in the other rooms.

Y  N **Are lights, stereos, TVs video games and computers off when no one is in the room?** Make sure to turn them off when not in use.

## THE BASEMENT

Y  N **Are your hot-water pipes insulated?**

Cover your hot-water pipes with insulation so they won't lose precious heat.

Y  N **Is your hot-water heater insulated?** Set your hot-water heater temperature to 120° Fahrenheit and if you have an electric hot-water heater, cover it with a water-heater wrap.

Y  N **Has your heating and cooling equipment been serviced regularly?** This needs to be done at the beginning of the heating/cooling seasons. Also, be sure to clean the filter every month or two and replace several times a year.

Y  N **Are your foundation windows and doors airtight?** Don't forget to check basement windows and doors for leaks then weatherize them as you did the others in your home.

Y  N **Are you doing your laundry in cold or warm water?** It's your laundry detergent that whitens your clothes, not the water temperature.



For more information about saving energy, go to [www.duke-energy.com](http://www.duke-energy.com)

## YOUR ENERGY-SAVING SCORE

Add up the number of YES boxes you checked and find out your score.

\_\_\_ **Total number of yes answers**  
(1 point each)

0 – 5 You are an energy hog.

Oink, Oink!



6 – 11 Come on. You can do better than that.



12 – 17 OK, now you are seeing the light.



18 – 24 Congratulations! You are an official Energy Saving Star.





**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-035**

**REQUEST:**

Please reference the Application at page 19. With which program are any energy savings captured? (i.e., Residential Conservation and Energy Education Program or Payment Plus.)

**RESPONSE:**

While all participants have the opportunity to get weatherization, not all of them do so. This is because they have already had weatherization completed in their home by Duke Energy or cannot get approval from their landlord to participate. The evaluations look at customers who have participated in Payment Plus that receive weatherization and those that do not. This disaggregated information is then used to determine program savings.

**PERSON RESPONSIBLE:** Richard G. Stevie



**Attorney General First Set Data Requests**  
**Duke Energy Kentucky Case No. 2007-00369**  
**Date Received: December 27, 2007**  
**Response Due Date: January 16, 2008**

**AG-DR-01-036**

**REQUEST:**

Please describe what specific types of customer information are collected under the Payment Plus Program.

- (a) Additionally, describe how any personal information collected under the program is protected from disclosure by the company and any contractors.
- (b) State the terms of the policy of the company and any contractors regarding retention of this information.

**RESPONSE:**

The data collected under Payment Plus includes – Customer Name, Address, City, State, Zip Code, utility account number, utility usage, utility payment schedule, arrearage balance of customer account, past weatherization services.

- (a) Duke Energy and its contractors sign and adhere to strict proprietary agreements relating to any confidential customer data.
- (b) Retention of these records is indefinite.

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-037**

**REQUEST:**

Please indicate what percentage, if known, of Payment Plus Program participants are homeowners.

- (a) If any program participants are tenants, does the company believe that it is appropriate for ratepayers to subsidize the costs of implemented measures that are arguably more attributable as the responsibility of the landlord? If so, why?

**RESPONSE:**

The contracting agency, Northern Kentucky Community Action, reports that 1/3 of participants are homeowners. All participants whether renters or owners are responsible for paying their energy bill and have a direct account in their name with Duke Energy.

- (a) See response to AG-DR-01-008(a).

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-038**

**REQUEST:**

Please provide the number of Payment Plus Program participants for the time period encompassing July 1, 2006 through June 30, 2007.

**RESPONSE:**

Energy Education Workshop Attendees – 168  
Financial Management Workshop Attendees – 140  
Weatherization customers – 73 completed

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-039**

**REQUEST:**

Please reference the Application at page 20. Provide a copy of the evaluation report for the Payment Plus Program (formerly the Home Energy Assistance Plus Program).

**RESPONSE:**

See response to AG-DR-01-029.

**PERSON RESPONSIBLE:** Richard G. Stevie



**Attorney General First Set Data Requests**  
**Duke Energy Kentucky Case No. 2007-00369**  
**Date Received: December 27, 2007**  
**Response Due Date: January 16, 2008**

**AG-DR-01-040**

**REQUEST:**

Please reference the Application at page 19. Describe in detail how budget counseling efforts along with the \$150.00 incentive relate to the company's DSM efforts.

- (a) Does the company believe that such efforts will have any impact on energy consumption?
- (b) Does the Company have any verifiable data to indicate that counseling efforts reduce participant's energy consumption?

**RESPONSE:**

Demand Side Management (DSM) means reducing energy use on the customer's side of the meter. Through energy use education, customers learn how to reduce their bill. Through understanding financial management, they also learn how to manage their money to pay their energy bill thus reducing arrearages. This also helps the customer understand how much their energy bill represents of their total household budget and further motivates conservation habits. The basis for this Program is HB 305.

- (a) Yes, see evaluation report provided in response to AG-DR-01-029.
- (b) Yes, see evaluation report provided in response to AG-DR-01-029.

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-041**

**REQUEST:**

Please reference the Application at page 19. Describe in detail the Company's reasoning for offering an incentive for weatherization services under its Residential Conservation and Energy Education Program.

**RESPONSE:**

Incentives for weatherization services under the Residential Conservation & Energy Education ("RCEE") Program are only provided through the Payment Plus Program. These credits are part of the entire program protocol that was designed to motivate low income customers to participate in all aspects of the program so they can reduce their overall energy usage. By utilizing the Payment Plus workshops to recruit and process paperwork with multiple RCEE participants at the same time, there are program cost savings for RCEE as well.

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-042**

**REQUEST:**

Please reference the Application at page 20. Provide the complete factual basis for the statement by the Company that "this program is cost effective as designed."

**RESPONSE:**

In the Company's filing last year (Case No. 2006-00426), the Utility Cost Test result reported was 1.45 which indicates that the program is cost effective.

**PERSON RESPONSIBLE:** Michael Goldenberg  
Kathy Schroder  
Richard Morgan



**Attorney General First Set Data Requests**  
**Duke Energy Kentucky Case No. 2007-00369**  
**Date Received: December 27, 2007**  
**Response Due Date: January 16, 2008**

**AG-DR-01-043**

**REQUEST:**

Please reference the Application at page 20. Provide the number of control days and hours for the last five (5) years. (Each yearly time period should encompass the control days and hours between July 1 and June 30. As an illustration, the previous year encompasses July 1, 2006 through June 30, 2007).

**RESPONSE:**

Duke Energy Kentucky control events began in July, 2005. First installations began in July, 2004. The control event history is as follows.

**July 1, 2004 to June 30, 2005**

<b>Control Days</b>	<b>Hours</b>
8/27/04	4
9/15/04	4
6/6/2005	4
6/8/2005	4
6/9/2005	4

**July 1, 2005 to June 30, 2006**

<b>Control Days</b>	<b>Hours</b>
7/20/2005	4
7/21/2005	4
7/25/2005	6
7/26/2005	4
8/2/2005	3
8/4/2005	4
8/12/2005	4

**July 1, 2006 to June 30, 2007**

<b>Control Days</b>	<b>Hours</b>
7/17/2006	3
7/19/2006	3
7/26/2006	3
8/2/2006	3
8/7/2006	3
6/7/2007	3

**PERSON RESPONSIBLE:** Deanna Bowden



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-044**

**REQUEST:**

Please reference the Application Appendix C at page 7. State whether the load reduction listed for Duke Kentucky customers (8MW) was estimated entirely from statistical data or whether actual data was used. If estimated from statistical data, please provide the sample size from which the results were obtained.

**RESPONSE:**

The PowerManager load reduction estimates utilized actual data from a randomly sampled group of program participants. The actual data utilized include 1) hourly usage data from 36 premise interval meters installed in Kentucky during summer 2007 and 22 premise interval meters installed in Kentucky during summer 2006, and 2) hourly run time data obtained from 39 measurement loggers attached to participants' outdoor compressor units during summer 2007 and 22 measurement loggers attached to participants' outdoor compressor units during summer 2006.

**PERSON RESPONSIBLE:** Thomas L. Osterhus



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-045**

**REQUEST:**

Please reference the Application Appendix C at page 7. List the margin of error in the load reduction results reported by the evaluator.

**RESPONSE:**

The margins of error were not reported in this period's evaluation for the following reasons. First, measurement efforts during 2007 to quantify the magnitude and variance of the connected loads were not successful. Significant differences are believed to exist between nameplate-connected load and actual connected load during peak event hours. Future measurement activities will explore this difference. Second, there are several sources of uncertainty in the load reduction estimates, and it is not obvious how to statistically combine or integrate these uncertainty sources into a single measure with which an overall margin of error can be derived. Currently, the known sources of uncertainty include uncertainty in the connected load, standard error related to natural and interrupted duty cycles, standard error of the programming factors, standard error of the paging signals, and the standard error of the shed factors at the home. Once all sources of uncertainty have been quantified, Duke Energy Kentucky will provide an overall margin of error which includes all of these sources jointly.

**PERSON RESPONSIBLE:** Thomas L. Osterhus



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-046**

**REQUEST:**

Please reference the Application Appendix C at page 11. Provide the number of switches that failed to perform when load control was initiated.

- (a) Please provide the total number of switches installed by Duke in Kentucky.

**RESPONSE:**

The information for failed switches is provided in pages 13 and 14 of Appendix C. Overall program participant counts during the 2007 test period are provided in Table 5-12a on page 23 of Appendix C.

**PERSON RESPONSIBLE:** Thomas L. Osterhus  
Donald Durack



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-047**

**REQUEST:**

Please reference the Application Appendix C at page 24. Provide the number of units with inaccurate data.

- (a) Was such data discarded? If not, why?

**RESPONSE:**

The 18 problematic switches in Kentucky discussed on page 24 of Appendix C have received on site inspections. Seven switches have been fixed, and 11 await resolution scheduled to be completed prior to the summer 2008 control events.

- (a) The data for problematic switches is incorporated into the operability study, and in that way lowers the load reduction results and forecasts. Yet, the program remains cost effective, despite the implicit inclusion of non-operational switches.

**PERSON RESPONSIBLE:** Thomas L. Osterhus  
Donald Durack



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-048**

**REQUEST:**

Please reference the Application Appendix C at page 9. Provide a list of all variables which were normalized or estimated by the evaluator as part of the evaluation.

**RESPONSE:**

The connected load is estimated from a regression of premise KWH on duty cycle, where rated amps is not available, and power factor is normalized to a best-fit power factor. More detail on these estimates can be found on page 10 of Appendix C.

**PERSON RESPONSIBLE:** Thomas L. Osterhus



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-049**

**REQUEST:**

Please reference the Application at page 23. Provide cost per participant data for this program.

**RESPONSE:**

During the calendar year, 2006, for new installations, the average cost per participant is \$226.74.

**PERSON RESPONSIBLE:** Deanna Bowden



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-050**

**REQUEST:**

Please reference the Application at page 24. Provide information as to how this program is significant to the Company's integrated resource planning.

**RESPONSE:**

The program has proven to be a cost effective resource, even during these early installation and operational phases, and a well-received energy service offering among Duke Energy customers. Because this demand side resource is more cost effective than alternative supply side resources (e.g., natural gas fired peaker), least cost planning principles upheld and maintained within the integrated resource planning process are likely to continue to include this demand side resource into the overall plan.

**PERSON RESPONSIBLE:** Richard G. Stevie



**Attorney General First Set Data Requests**  
**Duke Energy Kentucky Case No. 2007-00369**  
**Date Received: December 27, 2007**  
**Response Due Date: January 16, 2008**

**AG-DR-01-051**

**REQUEST:**

Please reference the Application at page 24. Estimate the cost of providing electrical service during the control periods in lieu of control of the units in the program.

- (a) Provide the supporting calculations and assumptions required to arrive at this number.

**RESPONSE:**

The available data for control event hours back to 2005 are provided at Attachment AG-DR-01-051.

- (a) The data was downloaded from MISO.

**PERSON RESPONSIBLE:** Thomas L. Osterhus  
Richard G. Stevie

Node	MISO Data Date	Start Hour	Day Ahead Price	Real Time Price
1315	06/06/2005	00:00:00 00	20.79	23.03
1315	06/06/2005	01:00:00 01	18.35	18.24
1315	06/06/2005	02:00:00 02	17.43	15.11
1315	06/06/2005	03:00:00 03	17.46	14.79
1315	06/06/2005	04:00:00 04	18.77	18.96
1315	06/06/2005	05:00:00 05	23.01	22.53
1315	06/06/2005	06:00:00 06	27.97	32.46
1315	06/06/2005	07:00:00 07	38.58	71.82
1315	06/06/2005	08:00:00 08	46.14	65.66
1315	06/06/2005	09:00:00 09	62.67	91.23
1315	06/06/2005	10:00:00 10	67.55	94.70
1315	06/06/2005	11:00:00 11	73.22	54.78
1315	06/06/2005	12:00:00 12	73.49	86.04
1315	06/06/2005	13:00:00 13	81.36	75.50
1315	06/06/2005	14:00:00 14	80.31	75.42
1315	06/06/2005	15:00:00 15	80.09	84.82
1315	06/06/2005	16:00:00 16	75.37	90.64
1315	06/06/2005	17:00:00 17	63.70	66.13
1315	06/06/2005	18:00:00 18	60.27	63.84
1315	06/06/2005	19:00:00 19	59.05	48.43
1315	06/06/2005	20:00:00 20	61.14	61.75
1315	06/06/2005	21:00:00 21	50.83	70.57
1315	06/06/2005	22:00:00 22	33.59	32.08
1315	06/06/2005	23:00:00 23	23.63	36.30
1315	06/08/2005	00:00:00 00	25.83	28.76
1315	06/08/2005	01:00:00 01	21.98	26.96
1315	06/08/2005	02:00:00 02	20.98	22.80
1315	06/08/2005	03:00:00 03	20.56	22.37
1315	06/08/2005	04:00:00 04	21.73	23.84
1315	06/08/2005	05:00:00 05	24.73	27.04
1315	06/08/2005	06:00:00 06	32.11	35.74
1315	06/08/2005	07:00:00 07	42.10	61.38
1315	06/08/2005	08:00:00 08	56.02	48.16
1315	06/08/2005	09:00:00 09	71.14	56.22
1315	06/08/2005	10:00:00 10	88.96	130.73
1315	06/08/2005	11:00:00 11	93.49	91.87
1315	06/08/2005	12:00:00 12	96.68	69.75
1315	06/08/2005	13:00:00 13	100.92	66.58
1315	06/08/2005	14:00:00 14	102.84	86.07
1315	06/08/2005	15:00:00 15	101.26	126.47
1315	06/08/2005	16:00:00 16	101.26	62.74
1315	06/08/2005	17:00:00 17	97.98	62.91
1315	06/08/2005	18:00:00 18	94.99	68.69
1315	06/08/2005	19:00:00 19	93.53	49.22
1315	06/08/2005	20:00:00 20	81.48	74.67
1315	06/08/2005	21:00:00 21	72.03	61.07
1315	06/08/2005	22:00:00 22	49.16	31.41
1315	06/08/2005	23:00:00 23	34.42	33.37
1315	06/09/2005	00:00:00 00	27.65	26.16
1315	06/09/2005	01:00:00 01	23.70	24.35

1315	06/09/2005 02:00:00 02	21.32	23.73
1315	06/09/2005 03:00:00 03	21.10	22.25
1315	06/09/2005 04:00:00 04	22.06	24.32
1315	06/09/2005 05:00:00 05	26.57	26.79
1315	06/09/2005 06:00:00 06	32.58	33.45
1315	06/09/2005 07:00:00 07	46.38	33.09
1315	06/09/2005 08:00:00 08	64.29	43.94
1315	06/09/2005 09:00:00 09	87.10	72.23
1315	06/09/2005 10:00:00 10	90.09	69.16
1315	06/09/2005 11:00:00 11	96.52	81.44
1315	06/09/2005 12:00:00 12	100.93	87.37
1315	06/09/2005 13:00:00 13	102.67	108.91
1315	06/09/2005 14:00:00 14	104.93	111.65
1315	06/09/2005 15:00:00 15	109.34	123.38
1315	06/09/2005 16:00:00 16	103.84	79.67
1315	06/09/2005 17:00:00 17	100.44	77.05
1315	06/09/2005 18:00:00 18	94.63	57.94
1315	06/09/2005 19:00:00 19	88.78	42.40
1315	06/09/2005 20:00:00 20	90.28	68.95
1315	06/09/2005 21:00:00 21	80.56	61.68
1315	06/09/2005 22:00:00 22	57.55	29.17
1315	06/09/2005 23:00:00 23	34.38	31.93
1315	07/20/2005 00:00:00 00	35.88	47.75
1315	07/20/2005 01:00:00 01	31.03	29.22
1315	07/20/2005 02:00:00 02	27.17	24.32
1315	07/20/2005 03:00:00 03	25.43	25.24
1315	07/20/2005 04:00:00 04	27.58	28.47
1315	07/20/2005 05:00:00 05	30.33	27.25
1315	07/20/2005 06:00:00 06	31.11	26.34
1315	07/20/2005 07:00:00 07	41.49	46.89
1315	07/20/2005 08:00:00 08	56.61	83.66
1315	07/20/2005 09:00:00 09	71.15	87.78
1315	07/20/2005 10:00:00 10	82.14	67.47
1315	07/20/2005 11:00:00 11	93.92	136.57
1315	07/20/2005 12:00:00 12	100.50	104.93
1315	07/20/2005 13:00:00 13	107.96	104.92
1315	07/20/2005 14:00:00 14	113.18	74.81
1315	07/20/2005 15:00:00 15	121.33	138.85
1315	07/20/2005 16:00:00 16	119.92	135.40
1315	07/20/2005 17:00:00 17	106.56	112.62
1315	07/20/2005 18:00:00 18	97.43	121.50
1315	07/20/2005 19:00:00 19	85.13	100.91
1315	07/20/2005 20:00:00 20	101.10	91.21
1315	07/20/2005 21:00:00 21	96.03	94.63
1315	07/20/2005 22:00:00 22	74.26	45.77
1315	07/20/2005 23:00:00 23	55.08	37.01
1315	07/21/2005 00:00:00 00	38.26	69.66
1315	07/21/2005 01:00:00 01	31.80	34.57
1315	07/21/2005 02:00:00 02	28.17	30.35
1315	07/21/2005 03:00:00 03	26.02	26.30
1315	07/21/2005 04:00:00 04	27.54	32.50
1315	07/21/2005 05:00:00 05	30.93	38.52

1315	07/21/2005 06:00:00 06	33.25	47.51
1315	07/21/2005 07:00:00 07	48.01	69.09
1315	07/21/2005 08:00:00 08	59.28	73.69
1315	07/21/2005 09:00:00 09	72.40	46.01
1315	07/21/2005 10:00:00 10	90.37	73.01
1315	07/21/2005 11:00:00 11	93.16	80.56
1315	07/21/2005 12:00:00 12	95.76	77.97
1315	07/21/2005 13:00:00 13	108.91	125.78
1315	07/21/2005 14:00:00 14	110.95	93.39
1315	07/21/2005 15:00:00 15	120.31	97.03
1315	07/21/2005 16:00:00 16	113.25	82.58
1315	07/21/2005 17:00:00 17	105.25	100.41
1315	07/21/2005 18:00:00 18	98.93	106.90
1315	07/21/2005 19:00:00 19	85.86	90.07
1315	07/21/2005 20:00:00 20	96.46	133.10
1315	07/21/2005 21:00:00 21	88.03	77.04
1315	07/21/2005 22:00:00 22	69.05	35.12
1315	07/21/2005 23:00:00 23	55.09	51.52
1315	07/25/2005 00:00:00 00	45.95	63.56
1315	07/25/2005 01:00:00 01	36.74	34.08
1315	07/25/2005 02:00:00 02	33.67	34.40
1315	07/25/2005 03:00:00 03	31.37	36.07
1315	07/25/2005 04:00:00 04	32.06	38.29
1315	07/25/2005 05:00:00 05	34.55	41.08
1315	07/25/2005 06:00:00 06	40.21	42.63
1315	07/25/2005 07:00:00 07	58.92	132.46
1315	07/25/2005 08:00:00 08	74.41	91.58
1315	07/25/2005 09:00:00 09	86.57	142.55
1315	07/25/2005 10:00:00 10	100.38	91.98
1315	07/25/2005 11:00:00 11	107.79	115.01
1315	07/25/2005 12:00:00 12	113.50	187.11
1315	07/25/2005 13:00:00 13	123.55	162.27
1315	07/25/2005 14:00:00 14	129.71	152.06
1315	07/25/2005 15:00:00 15	141.79	148.63
1315	07/25/2005 16:00:00 16	137.39	184.65
1315	07/25/2005 17:00:00 17	122.26	205.24
1315	07/25/2005 18:00:00 18	117.36	203.29
1315	07/25/2005 19:00:00 19	106.78	189.69
1315	07/25/2005 20:00:00 20	109.69	166.87
1315	07/25/2005 21:00:00 21	103.43	122.62
1315	07/25/2005 22:00:00 22	74.75	72.94
1315	07/25/2005 23:00:00 23	60.10	101.35
1315	07/26/2005 00:00:00 00	55.07	48.57
1315	07/26/2005 01:00:00 01	39.79	45.85
1315	07/26/2005 02:00:00 02	35.11	37.21
1315	07/26/2005 03:00:00 03	33.94	34.83
1315	07/26/2005 04:00:00 04	34.21	34.63
1315	07/26/2005 05:00:00 05	39.98	65.59
1315	07/26/2005 06:00:00 06	43.48	81.58
1315	07/26/2005 07:00:00 07	63.21	63.22
1315	07/26/2005 08:00:00 08	74.46	95.88
1315	07/26/2005 09:00:00 09	84.22	105.27

1315	07/26/2005 10:00:00 10	86.87	132.24
1315	07/26/2005 11:00:00 11	93.71	120.69
1315	07/26/2005 12:00:00 12	100.99	147.35
1315	07/26/2005 13:00:00 13	111.92	163.66
1315	07/26/2005 14:00:00 14	111.00	152.78
1315	07/26/2005 15:00:00 15	107.38	157.10
1315	07/26/2005 16:00:00 16	106.84	171.83
1315	07/26/2005 17:00:00 17	90.86	157.20
1315	07/26/2005 18:00:00 18	82.16	111.00
1315	07/26/2005 19:00:00 19	78.65	67.74
1315	07/26/2005 20:00:00 20	85.97	57.68
1315	07/26/2005 21:00:00 21	75.51	31.47
1315	07/26/2005 22:00:00 22	60.90	38.77
1315	07/26/2005 23:00:00 23	47.45	54.46
1315	08/02/2005 00:00:00 00	39.76	45.12
1315	08/02/2005 01:00:00 01	32.04	30.24
1315	08/02/2005 02:00:00 02	28.00	29.61
1315	08/02/2005 03:00:00 03	26.17	26.96
1315	08/02/2005 04:00:00 04	27.56	28.54
1315	08/02/2005 05:00:00 05	32.16	37.65
1315	08/02/2005 06:00:00 06	35.79	34.78
1315	08/02/2005 07:00:00 07	53.00	55.73
1315	08/02/2005 08:00:00 08	72.30	61.61
1315	08/02/2005 09:00:00 09	89.79	98.91
1315	08/02/2005 10:00:00 10	94.60	116.81
1315	08/02/2005 11:00:00 11	101.59	104.25
1315	08/02/2005 12:00:00 12	110.50	134.00
1315	08/02/2005 13:00:00 13	117.60	98.65
1315	08/02/2005 14:00:00 14	124.72	134.55
1315	08/02/2005 15:00:00 15	128.39	152.33
1315	08/02/2005 16:00:00 16	125.05	149.52
1315	08/02/2005 17:00:00 17	106.40	105.38
1315	08/02/2005 18:00:00 18	105.53	91.99
1315	08/02/2005 19:00:00 19	102.64	98.56
1315	08/02/2005 20:00:00 20	111.82	117.17
1315	08/02/2005 21:00:00 21	100.64	78.24
1315	08/02/2005 22:00:00 22	74.28	79.60
1315	08/02/2005 23:00:00 23	60.24	67.83
1315	08/04/2005 00:00:00 00	55.10	91.54
1315	08/04/2005 01:00:00 01	38.06	52.22
1315	08/04/2005 02:00:00 02	34.83	37.28
1315	08/04/2005 03:00:00 03	33.05	34.08
1315	08/04/2005 04:00:00 04	34.72	32.85
1315	08/04/2005 05:00:00 05	38.02	34.76
1315	08/04/2005 06:00:00 06	46.36	36.60
1315	08/04/2005 07:00:00 07	65.46	66.37
1315	08/04/2005 08:00:00 08	77.62	122.97
1315	08/04/2005 09:00:00 09	86.63	85.36
1315	08/04/2005 10:00:00 10	91.61	86.55
1315	08/04/2005 11:00:00 11	97.73	180.85
1315	08/04/2005 12:00:00 12	98.93	317.08
1315	08/04/2005 13:00:00 13	103.35	247.56

1315	08/04/2005 14:00:00 14	109.04	300.50
1315	08/04/2005 15:00:00 15	113.05	271.76
1315	08/04/2005 16:00:00 16	114.97	151.23
1315	08/04/2005 17:00:00 17	102.70	193.58
1315	08/04/2005 18:00:00 18	95.50	170.73
1315	08/04/2005 19:00:00 19	89.90	184.19
1315	08/04/2005 20:00:00 20	100.63	162.12
1315	08/04/2005 21:00:00 21	86.49	139.60
1315	08/04/2005 22:00:00 22	75.05	38.22
1315	08/04/2005 23:00:00 23	59.62	34.45
1315	08/12/2005 00:00:00 00	50.65	34.71
1315	08/12/2005 01:00:00 01	35.33	25.84
1315	08/12/2005 02:00:00 02	31.83	16.96
1315	08/12/2005 03:00:00 03	29.21	21.83
1315	08/12/2005 04:00:00 04	33.09	27.10
1315	08/12/2005 05:00:00 05	44.66	47.34
1315	08/12/2005 06:00:00 06	43.49	30.95
1315	08/12/2005 07:00:00 07	57.12	44.86
1315	08/12/2005 08:00:00 08	75.29	102.57
1315	08/12/2005 09:00:00 09	93.16	64.04
1315	08/12/2005 10:00:00 10	102.10	79.43
1315	08/12/2005 11:00:00 11	119.71	166.10
1315	08/12/2005 12:00:00 12	125.04	301.35
1315	08/12/2005 13:00:00 13	135.41	343.12
1315	08/12/2005 14:00:00 14	136.34	251.01
1315	08/12/2005 15:00:00 15	136.40	335.17
1315	08/12/2005 16:00:00 16	129.77	239.43
1315	08/12/2005 17:00:00 17	126.51	60.45
1315	08/12/2005 18:00:00 18	108.95	82.45
1315	08/12/2005 19:00:00 19	90.76	126.45
1315	08/12/2005 20:00:00 20	109.35	167.93
1315	08/12/2005 21:00:00 21	77.04	63.99
1315	08/12/2005 22:00:00 22	61.71	32.35
1315	08/12/2005 23:00:00 23	51.44	132.33
1315	07/17/2006 00:00:00 00	35.87	65.74
1315	07/17/2006 01:00:00 01	27.77	43.29
1315	07/17/2006 02:00:00 02	25.95	28.08
1315	07/17/2006 03:00:00 03	25.03	27.68
1315	07/17/2006 04:00:00 04	25.87	28.81
1315	07/17/2006 05:00:00 05	27.89	28.13
1315	07/17/2006 06:00:00 06	35.76	34.13
1315	07/17/2006 07:00:00 07	62.41	111.99
1315	07/17/2006 08:00:00 08	75.49	38.90
1315	07/17/2006 09:00:00 09	92.13	70.97
1315	07/17/2006 10:00:00 10	98.15	116.74
1315	07/17/2006 11:00:00 11	115.75	76.88
1315	07/17/2006 12:00:00 12	117.17	91.99
1315	07/17/2006 13:00:00 13	115.87	83.05
1315	07/17/2006 14:00:00 14	123.54	118.48
1315	07/17/2006 15:00:00 15	127.09	201.32
1315	07/17/2006 16:00:00 16	119.14	94.11
1315	07/17/2006 17:00:00 17	102.90	76.50

1315	07/17/2006 18:00:00 18	108.02	70.66
1315	07/17/2006 19:00:00 19	97.30	66.99
1315	07/17/2006 20:00:00 20	99.06	79.52
1315	07/17/2006 21:00:00 21	96.75	74.03
1315	07/17/2006 22:00:00 22	73.21	35.80
1315	07/17/2006 23:00:00 23	47.09	24.96
1315	07/19/2006 00:00:00 00	32.89	25.71
1315	07/19/2006 01:00:00 01	26.95	11.86
1315	07/19/2006 02:00:00 02	23.47	15.77
1315	07/19/2006 03:00:00 03	23.34	17.97
1315	07/19/2006 04:00:00 04	24.70	21.81
1315	07/19/2006 05:00:00 05	26.71	22.36
1315	07/19/2006 06:00:00 06	28.22	25.82
1315	07/19/2006 07:00:00 07	32.01	30.56
1315	07/19/2006 08:00:00 08	48.19	31.62
1315	07/19/2006 09:00:00 09	59.96	42.20
1315	07/19/2006 10:00:00 10	75.34	78.13
1315	07/19/2006 11:00:00 11	79.43	65.51
1315	07/19/2006 12:00:00 12	81.78	57.76
1315	07/19/2006 13:00:00 13	84.10	52.17
1315	07/19/2006 14:00:00 14	88.61	90.10
1315	07/19/2006 15:00:00 15	95.68	84.86
1315	07/19/2006 16:00:00 16	84.95	66.09
1315	07/19/2006 17:00:00 17	74.17	51.76
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1315	07/19/2006 22:00:00 22	46.72	34.24
1315	07/19/2006 23:00:00 23	39.15	47.49
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1315	07/26/2006 02:00:00 02	24.75	26.23
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1315	07/26/2006 05:00:00 05	26.40	33.36
1315	07/26/2006 06:00:00 06	29.18	30.16
1315	07/26/2006 07:00:00 07	41.74	37.38
1315	07/26/2006 08:00:00 08	53.64	49.60
1315	07/26/2006 09:00:00 09	68.01	68.72
1315	07/26/2006 10:00:00 10	80.08	69.56
1315	07/26/2006 11:00:00 11	86.23	47.82
1315	07/26/2006 12:00:00 12	90.22	69.60
1315	07/26/2006 13:00:00 13	100.26	121.81
1315	07/26/2006 14:00:00 14	108.21	77.94
1315	07/26/2006 15:00:00 15	117.78	99.85
1315	07/26/2006 16:00:00 16	110.28	77.17
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1315	07/26/2006 18:00:00 18	92.21	79.08
1315	07/26/2006 19:00:00 19	77.76	89.35
1315	07/26/2006 20:00:00 20	87.58	67.76
1315	07/26/2006 21:00:00 21	74.20	56.79

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1315	07/26/2006 23:00:00 23	34.13	40.95
1315	08/02/2006 00:00:00 00	103.64	112.33
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1315	08/02/2006 04:00:00 04	38.15	48.59
1315	08/02/2006 05:00:00 05	53.36	71.50
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1315	08/07/2006 06:00:00 06	30.83	34.33
1315	08/07/2006 07:00:00 07	41.25	54.00
1315	08/07/2006 08:00:00 08	55.50	79.76
1315	08/07/2006 09:00:00 09	67.89	115.82
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1315	08/07/2006 20:00:00 20	70.43	72.25
1315	08/07/2006 21:00:00 21	53.11	83.78
1315	08/07/2006 22:00:00 22	40.68	30.59
1315	08/07/2006 23:00:00 23	30.81	31.42
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1315	06/07/2007 01:00:00 01	17.56	8.85

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1315	06/07/2007 03:00:00 03	16.96	17.07
1315	06/07/2007 04:00:00 04	18.56	17.99
1315	06/07/2007 05:00:00 05	21.11	16.34
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1315	06/07/2007 16:00:00 16	113.45	149.29
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1315	06/07/2007 18:00:00 18	91.44	113.13
1315	06/07/2007 19:00:00 19	85.19	47.90
1315	06/07/2007 20:00:00 20	87.63	101.07
1315	06/07/2007 21:00:00 21	67.07	57.00
1315	06/07/2007 22:00:00 22	54.55	47.23
1315	06/07/2007 23:00:00 23	38.43	35.49
1315	07/25/2007 00:00:00 00	20.91	21.26
1315	07/25/2007 01:00:00 01	19.63	17.96
1315	07/25/2007 02:00:00 02	18.58	19.26
1315	07/25/2007 03:00:00 03	18.34	19.15
1315	07/25/2007 04:00:00 04	19.44	20.23
1315	07/25/2007 05:00:00 05	20.45	19.95
1315	07/25/2007 06:00:00 06	20.54	22.57
1315	07/25/2007 07:00:00 07	24.10	31.21
1315	07/25/2007 08:00:00 08	27.33	29.12
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1315	07/25/2007 11:00:00 11	51.69	36.01
1315	07/25/2007 12:00:00 12	59.77	34.27
1315	07/25/2007 13:00:00 13	64.16	50.14
1315	07/25/2007 14:00:00 14	68.31	67.09
1315	07/25/2007 15:00:00 15	76.87	106.51
1315	07/25/2007 16:00:00 16	70.35	41.44
1315	07/25/2007 17:00:00 17	57.23	67.56
1315	07/25/2007 18:00:00 18	48.31	73.64
1315	07/25/2007 19:00:00 19	43.36	53.96
1315	07/25/2007 20:00:00 20	46.85	66.79
1315	07/25/2007 21:00:00 21	36.81	26.26
1315	07/25/2007 22:00:00 22	29.20	27.49
1315	07/25/2007 23:00:00 23	24.05	23.11
1315	07/26/2007 00:00:00 00	22.06	22.39
1315	07/26/2007 01:00:00 01	20.35	20.83
1315	07/26/2007 02:00:00 02	19.28	18.12
1315	07/26/2007 03:00:00 03	18.79	18.83
1315	07/26/2007 04:00:00 04	19.85	19.41
1315	07/26/2007 05:00:00 05	21.72	19.85

1315	07/26/2007 06:00:00 06	21.69	22.75
1315	07/26/2007 07:00:00 07	25.60	26.83
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1315	07/26/2007 09:00:00 09	37.32	34.53
1315	07/26/2007 10:00:00 10	45.15	53.77
1315	07/26/2007 11:00:00 11	54.02	107.55
1315	07/26/2007 12:00:00 12	62.52	86.58
1315	07/26/2007 13:00:00 13	66.93	136.21
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1315	07/26/2007 15:00:00 15	78.11	92.92
1315	07/26/2007 16:00:00 16	70.99	34.59
1315	07/26/2007 17:00:00 17	59.18	39.04
1315	07/26/2007 18:00:00 18	48.88	63.17
1315	07/26/2007 19:00:00 19	45.29	76.77
1315	07/26/2007 20:00:00 20	50.24	105.20
1315	07/26/2007 21:00:00 21	39.20	51.63
1315	07/26/2007 22:00:00 22	31.31	37.25
1315	07/26/2007 23:00:00 23	24.35	39.42



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-052**

**REQUEST:**

Please reference the Application at page 24. Considering the limited number of control days utilized by the Company, is it the position of the Company that this program is cost effective? If so, please explain in detail why?

**RESPONSE:**

Yes, the program is cost effective, but the significant aspect of the program's overall value lies not with avoided hourly energy, but more so with its potential to provide needed short-run capacity. Unlike the construction of a natural gas fired peaker, which generally is requested to run 300 to 400 hours of the year, PowerManager may only be required to run for 20 or 30 hours per year. Moreover, where a peaker may cost \$65 to \$80 per KW per year to construct, PowerManager participation can be achieved more cost effectively than this construction cost. It is not surprising that the majority of PowerManager's value to the integrated resource plan lies with its potential to avoid capacity construction more so than its ability to produce low energy costs.

**PERSON RESPONSIBLE:** Thomas L. Osterhus  
Richard G. Stevie



**Attorney General First Set Data Requests  
Duke Energy Kentucky Case No. 2007-00369  
Date Received: December 27, 2007  
Response Due Date: January 16, 2008**

**AG-DR-01-053**

**REQUEST:**

Please reference the Application at page 24. Describe in detail any and all benefits to individuals participating in the program.

**RESPONSE:**

Customers benefit from the Power Manager program in the following ways. First, the switch is installed at no cost to the customer. Second, customers receive incentives for the initial installation of the switch. Third, customers receive additional incentives for participation in control events during the event season, May through September. Fourth, customers may remove themselves from the program at anytime. Fifth, customer research indicates that 90% of program participants surveyed during September of 2006 either did not notice the events. The temperature in their homes remained comfortable to them during the control event. Finally, customer research indicates that most customers (68%) perceive that deferring or avoiding power plant construction is important to them.

**PERSON RESPONSIBLE:** Thomas L. Osterhus